REMARKS

Claims 1-15 are pending in the application. The Examiner has objected to the specification for informalities. These informalities have been corrected by amendments to the specification above. Withdrawal of this amendment is requested.

Claim 3 was rejected under 35 USC 112, first paragraph, as failing to comply with the enablement requirement. In the action, the term 'truly' random noise was introduced. This was not in the claim as filed, mentioned anywhere in the specification and would seem to be an incorrect assumption. As defined in the specification on page 6, pseudo-random noise is random noise that has been manipulated to achieve other effects. This reference has been amended slightly to more clearly state that this is the definition of random noise and how it is differentiated over pseudo-random noise. When an applicant provides a definition of a term used in the claims, the claims are to be construed using that meaning. See the MPEP § 2173. One skilled in the art would understand that random noise is that produced by generation of random numbers, while pseudo-random noise is random noise generated by random numbers and then manipulated. It is therefore submitted that claim 3 meets the enablement requirement and requests withdrawal of this rejection.

Claims 3 and 4 were rejected under 35 USC 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Again, this requirement of having to provide a method to generate 'truly' random noise appears to have been based upon an incorrect assumption. As clearly defined in the specification, random noise is noise based upon random number generation and pseudo-random noise is random noise that has been manipulated. As example is even given in the specification as to how random noise is manipulated to produce pseudo-random noise. As applicants are allowed to be their own lexicographers, and the Applicants in this application have clearly defined the terms 'random noise' and 'pseudo-random noise,'

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there is no need to prove how one would generate 'truly' random noise. While Applicants do not believe it is necessary under the long-standing principles of patent examination, the current case law, or the MPEP, Applicants have amended claim 4 to more clearly define 'pseudo-random noise.' Withdrawal of this rejection is requested.

Claims 10-11 were rejected under 35 USC 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 10 and 11 had a minor typographical error that has been fixed by amendments to the claims above. Withdrawal of this rejection is requested.

Claims 12 was rejected under 35 USC 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 12 has been amended to more clearly point out that all of the error buffers are used. Withdrawal of this rejection is requested.

As the application claiming priority from the provisional application now meets the requirements of 35 USC 112, it is submitted that the objection to the priority claim can now be withdrawn. Withdrawal of this objection is requested.

Claims 1-9 were rejected under 35 USC 102(b) as being anticipated by Mintzer (US Patent No. 5,210,602).

With regard to claims 1 and 8, Mintzer teaches an error diffusion process in which the initial error value for the pixel at the start of the process has an error value of 0. See Mintzer column 1, lines 55-57; column 5, lines 18-23; and the equations at column 5, lines 29 and 51. As can be seen, the error values initially used for the first color are zero. Once the error values of the first color are determined, these values are then used to seed the values for the other color error stores. See Mintzer, column 5, line 67 through column 6, line 4. Alternative embodiments are disclosed including one in which a multiplier for the *diffused errors* is

provided, as cited at column 7, lines 36-42. However, there has to be an existing diffused error to which the multiplier is applied.

As discussed in detail in the specification of the instant application, the application of the invention is to provide initial error values at the beginning of the error diffusion process, to avoid patterns that may appear as a function of the diffusion process. See the instant specification at pages 2 and 3. Claims 1 and 8 have been amended to require that the first pixel have an error value that is non-zero. This is supported in the specification on page 7, lines 19-30, and Figure 2. It is therefore submitted that claims 1 and 8 are patentably distinguishable over the prior art and allowance of these claims is requested.

Claims 2 and 9 depend from claims 1 and 8 and should be ruled allowable for that reason and for their own merits. Mintzer does not teach using a random number generator to generate error diffusion seed values such that the first pixel has a non-zero error value. The coefficients used in Mintzer are applied to an error value e_i, which has been shown to start with a zero value. It is therefore submitted that claims 2 and 9 patentably distinguishable over the prior art and allowance of these claims is requested.

With regard to claims 3 and 4, Mintzer does not disclose that the first set of seed values are generated using random noise or pseudo-random noise, where the seed values are used to provide non-zero error values to pixels in the error diffusion process. It is therefore submitted that claims 3 and 4 are patentably distinguishable over the prior art and allowance of these claims is requested.

With regard to claim 5, as stated in the action, 'An error is *calculated* for the first color...' As discussed above, the initial error value for the first pixel is provided from the seed values. In Mintzer, the error values calculated from the pixel values is manipulated using the seed values, but the error values are not from the seed buffers as in the instant

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invention as claimed. It is therefore submitted that claim 5 is patentably distinguishable over the prior art and allowance of this claim is requested.

With regard to claim 7, the error diffusion constants in Mintzer are those applied to manipulate the actual error values produced by the error diffusion process, but are not used at the first calculation. In the instant application, those error diffusion constants are applied to manipulate the error from pixel values beyond the initial one, there is also an error diffusion value applied to the first pixel. Therefore, the initialization of the printing system in the instant invention as claimed is different than that of Mintzer. It is therefore submitted that claim 7 is patentably distinguishable over the prior art and allowance of these claims is requested.

Claims 10-11 are rejected under 35 USC 103(a) as being unpatentable over Mintzer in view of Ball ("Sam's Teach Yourself Linux in 24 Hours", Sam's Publishing, 1998). As discussed above, Mintzer does not teach that the software code contained on the compact disc or downloadable file includes code that has error values such that the first pixel has an error value that is non-zero. It is therefore submitted that claims 10 and 11 are patentably distinguishable over the prior art and allowance of these claims is requested.

Claims 12-15 are rejected under 35 USC 103(a) as being unpatentable over Mintzer in view of Shu (US Patent No. 5,757,976).

The combination of references does not teach that the seed values are used such that the first pixel has an error value that is non-zero. Therefore it is submitted that claim 12 is patentably distinguishable over the prior art and allowance of this claim is requested.
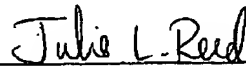
Claims 13-15 depend from claim 12 and should be ruled allowable for that reason and for their own merits.

The prior art made of record and not relied upon has been reviewed and is not considered pertinent to Applicant's disclosure. No new matter has been added by this

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amendment. Allowance of all claims is requested. The Examiner is encouraged to telephone

the undersigned at (503) 222-3613 if it appears that an interview would be helpful in

advancing the case.

Respectfully submitted,

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